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The market will have you: The arts of market attachment in a digital economy

Liz McFall and Joe Deville

Keywords: relations, having, conversation, feedback, sentiment, algorithms

Introduction

‘Click stream: an enormous, imperfect recreation of a man’s brain. Digital DNA. You are the numbers, John. Accessible in a million ways, all ones and zeros. Where you go, what you do there, questions asked, money spent, the brand of beer you drink. You are on show John, in an infinite number of ways. The most visible person imaginable. And right now someone is watching. (KD 2014: 257)

What can it possibly mean to say that the market will have you? Accustomed as we are to hearing about the havoc markets wreak upon social institutions, communities and individuals, it could perhaps signal the thuggishness of markets as in ‘h’ dropped, the market “is gonna ‘ave you”ⁱ. There is of course a whole tradition in economic sociology and anthropology from Polanyi onwards, of seeing what markets do this way. But since we are concerned, in this collection, with seeing how market exchange *produces*, rather than dissolves or proceeds from, social ties (see Cochoy in this volume), that is not the path we are taking.

Another possibility is that ‘having us’ signals the dystopian future that many commentators think is almost upon us. This is the future that K.D. is envisioning in the extract from the novel *Headless* above, one in which markets use their new toolkits to produce digital doppelgangers, doubles or DNA replicas to predict, place, pre-order and even purchase things without any action on our part. This is the same vision of accessibility, surveillance and modelling referenced famously in Spielberg’s 2002 depiction in *Minority Report* of a 2054 obsessed with prediction and saturated with scanners that identify, monitor and target consumersⁱⁱ. With Amazon in 2015 patenting ‘anticipatory shipping’, a logistics system designed to ship products before they are purchased, and with a catalogue of ‘smart’

technologies from face recognizing advertising billboards to self re-filling refrigerators already in existence, not to mention the conventional use of data mining and digital customer relationship management strategies across a variety of domains, these visions can even seem a bit conservative. Since Savage and Burrows published their prescient analysis of the challenges posed by digital transactional data in 2007, there has been a proliferation in the means of analysis of what sovereignty over what is now known as “Big Data” means for social science, for citizens and for consumers (Savage and Burrows, 2007; 2009; Burrows and Savage, 2014). There are now at least seven academic journals with ‘big data’ in their title (none of them in more than their third volume); Microsoft, Google, Facebook, Apple and Intel all have research facilities employing social scientists; digital methods, digital humanities and social science appointments and departments are springing up at universities everywhere and funders have announced a series of programmes designed to sponsor research in the area. Data science in 2016 is hip.

What all this might mean for market attachment, whether it does indeed signal a step-change in commercial capabilities to access, to know, even to ‘have’ their customers, is one of our concerns here. In the last decade, the capacity of the transactional data routinely gathered through retailers’ loyalty schemes and users’ online behaviour, to cluster associations between products, and between products and customers, has been causally linked to commercial efficacyⁱⁱⁱ. The big four, Apple, Amazon, Google and Facebook are, in this view, what they are, in large part because of their success in orchestrating these associations. This included, for example, wrangling with data associations to figure out the probability that purchasing X means that shopper Y will purchase Z next. Such is the potency of successful strategies, some claim, that we are conditioned not only to buy certain things, but to buy at particular times, in response to particular sorts of offer, in particular volumes and for occasions defined not by *a priori* social ties but through commercial signals that certain relationships should matter enough to mark with a gift.^{iv}

The digital toolkits and vast datasets behind such strategies are certainly new and they certainly aim to foster relationships with customers that might lead to stable attachments. Yet, amidst all the

hype about the power of big data, the consequences of who has the means to access, own, manage and control it, the epistemological and ontological possibilities of being able to simultaneously derive breadth and depth, quantitative and qualitative, insights from the same data-set, there has been little concrete, historically informed discussion of what exactly it is about market attachment that these changes change. Critics raise big questions about surveillance, privacy, dignity, rights and exploitation as Google, Apple, Facebook etc. own and enclose more and more of 'our' data (c.f. Lanier, 2013; Lyon, 2014; Ritzer and Jurgenson, 2010). This kind of challenge to techno-utopianism, as Bill Maurer (2015) has recently argued, is appealing. And yet it leaves out some really big questions about the nature of the data and the associations produced in digital networks. What if, Maurer ponders, instead of an era of enclosure and accumulation, this is one of assisted reproduction in which new beings and new kinds of relations are being created? Questions about relations, rather than ownership per se, then might become what matters most.

We tackle these questions in this chapter in a number of related steps. First we consider what relations, and more particularly 'having', means in the context of markets. Using as a departure point, the forgotten, then remembered, sociologist Gabriel Tarde's central provocation that what we are, our identities, are not a matter of 'being' but of 'having', we explore the idea that markets can only exist through this 'having'. The art of markets lies in how having - data, relations, associations, ties, 'us' - is practically accomplished. It is possible, as Bruno Latour and Vincent Lepinay (2009) have argued, that Tarde is a sociologist whose time has come, finally, more than a century after his death. The current general prevalence of digitisation now at last provides the conditions to test his initial hypotheses that qualitative quantification is possible. This chimes with the critical trend that sees digitisation as pumping up the domain corporations have over us. Yet, if this *is* what is changing, this is an historical change that needs, well, to be historicised. Our next step then is to consider the question of relations in markets historically. From the emblematic device of Customer Relationship Management we move to explore how central relationship management has been to marketing over time. Marketing, as Tadajewski (2009; 2015) has demonstrated, has a more subtle and varied history of relational strategies

than the presentist preoccupations with marketing innovations allow. The equivalence between relationality and marketing is captured in Tarde's account through the theme of conversation, which is scored as the necessary connective between buyers and sellers. Conversation *devises* market attachments by providing a channel through which sellers can talk, listen and respond to their customers.

We test this idea further, in the next section, by looking at how marketing conversations were conducted in two consumer finance product cases: the industrial life assurance company, Prudential Assurance and the payday loan company, Wonga. The two cases are very different but share the challenge of targeting the lower, 'bottom of the pyramid' end of the consumer finance market. Prudential grew rapidly in the late nineteenth century by catering for the appetite for small life assurance policies among the people Charles Masterman (1902) once characterised as the 'silent poor' as a mark of how little policymakers understood about their lives. How Prudential managed to get into conversation with the silent poor is a powerful exemplar of market attachments being devised. More than a century later, Wonga, began targeting a similarly low end of the consumer finance market with online payday loans. At Wonga, exemplary digital data techniques including website optimisation strategies and algorithms combining 1000s of datapoints were being used, the company claimed, to enable them to listen to their customers and target their product offers accordingly.

While Prudential's business model endured for over 150 years, it took around 5 years for trouble to set in at Wonga. This of course suggests nothing in general about the efficacy of digital means of market attachment but it does throw the spotlight on the other things that can get in the way even when advanced quanti-quali means of 'having' the customer – the new magic epistemologies – are in play. We close by considering the limits of epistemological modelling in a context of proliferant, superabundant data for accomplishing market attachment.

On Having: the question of relationships in marketing

Gabriel Tarde's economic sensibility is easier to follow when it is located in the right historical intellectual context. This was a moment in which Charles Darwin's account of evolution as the incidental by-product, not the goal, of material struggle in a world characterised by 'chance, change and difference' (Menand, 2001: 123) was having a profound impact across social thought. Darwin – among many other things – supplied a way of thinking about individuals and the relations and interactions between them rather than types or essences. By developing systems for analysing probabilities, relations and functions rather than causes, categories and purposes, Darwin sponsored the kind of relational, radically empirical disposition that can be found in Tarde's thinking. If the idea of natural selection offered an explanation of how organisms with certain characteristics are *randomly* favoured in certain environments for adaptation and survival – such that species evolve because they must struggle and not the other way around – then relations, interactions, adaptations *are* existence.

This concern with relations, rather than being or essence, is what places 'having' as the core of existence for Tarde. 'Possession' he wrote, 'is the universal fact, and there is no better term than that of 'acquisition' to express the formation and the growth of any being' (in Latour, 2002: 130). Entities are defined by their properties and by how they come to possess them. This avidity, this acquisitiveness carries no moral stain – it simply expresses the process by which all entities – including buyers and sellers, users and providers, products and markets – come into existence. As in chemistry, avidity concerns the generative nature of multiple bond interactions, or the ways that what an entity *is*, is entirely, radically, contingent on the relations formed around it. There is not, in nature or in markets, any being, essence, or property except that defined by dint of these relations. Tarde's Darwinian naturalizing of economic activity elevates it 'to the level of proliferation, multiplication, and invention, which will make it possible to explain the *content* of goods and not only the *form* of exchange' (Latour and Lepinay, 2009: 46).

Just as Latour (1991) argued of innovation in his classic discussion of the path that led to the technological and mass market establishment of the Kodak camera in the nineteenth century, the path

taken is one in which all actors, all entities, evolve together, becoming themselves through the associations forged round them. It is the length of the chain of associations that makes things real. The ‘continual extension in the syntagm (AND)’ (1991: 118) always signals another relation, that there is more to come and more to become. Step by step, relation by relation, markets owe their existence and their survival to this extension. The idea of interdependence is pushed to its furthest in Tarde’s thought to reveal individual identities, acts and authorships as apparitions – everything is collaboration and imitation in a world that ‘could not exist or change or advance a single step unless it possessed an untold store of blind routine and slavish imitation which was constantly being added to by successive generations’ (1903: 75).

One of the primary factors of production in this imitative, relational economy is conversation.

Conversation is eminently interesting to the economist. There is no economic relationship between men that is not first accompanied by an exchange of words, whether verbal, written, printed, telegraphed or telephoned. ... how do these needs for production and consumption – for sale and purchase – which have just been mutually satisfied by a trade concluded thanks to conversation arise? Most often, thanks again to conversations, which had spread the idea of a new product to buy or to produce from one interlocutor to another, and, along with this idea, had spread trust in the qualities of the product or in its forthcoming output, and finally the desire to consume it or to manufacture it. (Tarde in Latour and Lepinay, 2009: 49)

It is because of the relational and contagious character of imitation that conversation is so important to market exchange. Through conversations desire, belief and trust in products spreads, from one person to another, and through them, the efforts of marketing managers can be amplified. Following the babble of multiple lines of market-relevant conversation in the era in which Tarde was writing might sound like an exercise in the impossible. Yet, as we describe below, there were practical marketing techniques, even then, that companies used to ‘listen in’ to their customers. The existence of such techniques suggests that we pause before accepting wholesale the plausible arguments that it is only the present context of ubiquitous computing, viral marketing, social media and sentiment analysis, that, at

last, offers effective means of quantifying chatter, moods and inclinations (c.f. Latour and Lepinay, 2009).

Thinking about markets as long, multi-stranded, chains of relations has implications for how they are defined. Instead of imagining markets primarily as a space, arena or a forum, of whatever kind, in which buyers and sellers confront one another, they can be thought of as a distribution across a crowd of actors and intermediaries: suppliers, researchers, publicists, publishers etc. (c.f. Cochoy, 1998; Musselin and Paradeise, 2005; McFall, 2014b). A whole crowd play parts in making markets move. What buyers/consumers do *with* products, what sellers/producers do to find this out and then what they do *to* products in response, is the understated loop that practically defines markets. All markets can be thought of as employing ‘devices’, in the sense proposed by Muniesa, Callon and Millo (2007), that contribute to this looping of feedback within long, multi-stranded chains. The core task is to provide a mechanism for generating and transferring information from one place to another with the aim of producing particular sorts of action.

In the last two decades, through its combination of digital technologies and relationship marketing techniques, one device has made a particularly strong claim to this territory. Customer Relationship Management (CRM) systems developed in parallel with online retailing. They employ a dynamic mixture of the principles of relationship marketing, the ‘transactional data’ accumulated through sales records, online searches and/or retailer loyalty schemes and data management software. Through this mixture CRM proffers a solution to the problem of knowing, or having, distant, potentially anonymous customers through its apparently extraordinary surveillance capacities (see Mallard, this volume). CRM users are promised the capacity to ‘identify customers by attribute and behaviour; distinguish between them by profit contribution; facilitate better decisions on product design and promotion; target customers as individuals and as segments; as well as measuring promotional effectiveness and return on investment’ (Knox, O'Doherty, Vurdubakis and Westrup 2010: 340; see also Beckett, 2012; Felgate, Fearne and Di Falco, 2012). Through digitisation, especially in the user-generated Web 2.0, CRM, it is claimed, accelerates the blurring of production and

consumption into 'prosumption' (Ritzer and Jurgenson, 2010). But is CRM really having this sort of structurally transformative impact on markets and the production/consumption relation?

In the particular context of the last two decades CRM has set out to solve some of the particular contemporary forms taken by the market relationship problem. CRM promises to de-massify or 'mass personalise' consumers (c.f. Vargha, 2010) into individual profiles and deploy feedback technologies that automate consumption and modify marketing systems. Different sorts of outcome do emerge from CRM systems and this is because of their location in a distinct field of possibilities addressing the particular market problems presented by mass, relatively anonymous, geographically distributed, online exchange.

But market problems are always relational problems. One doesn't need to turn to Tarde's idiosyncratic economic psychology to find recognition of this. There is plenty of historical evidence documenting practitioners who equated the problem of marketing with that of relationships. Mark Tadajewski (2008) identifies the emergence of 'relationship marketing' as a distinct concept in the 1970s but questions whether it amounts to anything more than a 'remarketing' of the marketing concept that has been in circulation as far back as the seventeenth century. In a series of articles Tadajewski (2008; 2009; 2015) has fleshed out this argument with empirical descriptions of the role of relationships in the marketing philosophies and strategies adopted by practitioners from Daniel Defoe to John Wanamaker and in twentieth century industrial marketing. These accounts describe a set of ideas about the way to manage relationships in order to increase profitability and customer goodwill that was 'driven by practitioners and academics who were influenced by government regulators and the legal complexities of their day' (Tadajewski, 2009: 31).

From the interwar years, crowd psychology and propaganda theory, after the model of Edward Bernays, began to be deployed to meet the new challenges of relating to customers in the context of mass production (Schwarzkopf, 2008, 2009). After the war, emphasis shifted in some quarters to using psychological sciences and motivation research to get to know consumers and their desires even better than they knew themselves (Deville, 2015; Nixon, 2009; Miller and Rose 1997). Since then a long

succession of techniques have been used to socio-economically, anthropologically, and psycho-socio-demographically render consumers knowable using everything from government statistics to semiotic analysis to residential neighbourhood profiling in patented methods like PRIZM in the US, and ACORN and MOSAIC in the UK (Burrows and Gane, 2006). These techniques are all about building stable market attachments.

Some time ago now Hennion, Meadel and Bowker (1989: 204) argued that within organisations, ‘the big opposition between the product and the market’ is not dissolved by breaking down barriers but, conversely, by multiplying them in order to ‘localize and organise’ a series of small-scale face-to-face, bilateral encounters (see also Callon 2015). Barriers in the form of fields, sectors, areas, divisions or departments, transform the abstract problem of production and consumption into the more or less manageable, organisational process that - in practice - it always is. This characterisation applies even in digital marketing, despite the defining lack of physical co-presence of ‘producers’ and ‘consumers’, since the market encounter is never just between the buyer who clicks, and the seller who lists, but between a prolific and distributed series of specialist participants. This series, not a single magical intermediary or system, is what accomplishes exchange transactions. It is the series that puts ‘us’ *in* the market. Desire happens then, when we;

... have in front of us not a strange object, but an object that already contains us since we have been incorporated in it by a thousand techniques from the moment of its production; and it is to be ourselves but the simple addition of the objects through which we are defined. The product traces out the consumers, the consumers the product: the familiarity of the couple has replaced the otherness of the confrontation between the reality of things and the illusions of desire. (Hennion et al. 1989: 208)

This formulation softens the contrast between the solutions of digital marketing – whether they deploy CRM, crowdsourcing or social media – and traditional marketing. It is both banal and important to remember that the core work undertaken by CRM is different – but not all that different – from that of

the archetypal grocer in listening, remembering, reacting and responding to what their customers say and do in face-to-face interactions.

What, then, does a comparison between the work of digitally mediated technologies of market attachment and some of their fleshier forebears afford? This is the question we pursue in the remainder of the chapter through a brief discussion of the marketing work of Prudential Assurance Company and the payday lender Wonga. These two UK-based companies, despite the temporal distance that separates them and despite the quite different sets of techniques and technologies they employ, share a common concern with soliciting and securing the attachment of sets of customers often struggling to stay afloat in the economic margins of society.

In conversation with the silent poor

Prudential Assurance

And we are very silent, so very silent that no one to this hour knows what we think on any subject or why we think it. Masterman (1902)

When Charles Masterman wrote these lines he meant to signal his exasperation at how little policymakers understood of the lives of the new, urban industrial poor. Around the same time, one sector of the financial services industry was experiencing phenomenal growth by selling a product to precisely this group. Industrial life assurance, was a form of small sum life assurance that began to be traded in the 1840s.^v It was named after its target market amongst the ‘industrious’ classes, those whose income was wholly dependent on their own labours. By the end of the century millions upon millions of policies had been sold. At the industry’s peak in the 1940s, there were over 100 million industrial life policies in force in Britain. Table 1 offers a snapshot of the rapid growth of the sector in the last decade of the nineteenth century. The undisputed industry leader was Prudential Assurance Company, established in 1848 and by 1900 three to four times, depending on which measure is used, the size of its nearest rivals. By 1890, in premium income terms, Prudential was not only the largest company in the

industrial sector but the largest British life company over all. In 1870 Prudential sold 670,000 industrial life policies and in 1891 they sold 10,000,000^{vi}.

Table 1: Industrial Life Assurance Associations (1890-1902)

Source: Adapted from The Economist, 1904

Associations.	Founded.	Income.		Funds.	
		1902.	1890.	1902.	1890.
COMPANIES.					
British Legal, L.	1863	£ 142,000	£ 51,000	£ 187,000	£ 97,000
British Workman's, L.	1866	822,000	275,000	927,000	109,000
Citizens', Limited ..	1886	176,000	..	316,000	..
London, Edinburgh, and Glasgow, Lim.	1881	376,000	187,000	259,000	28,000
London & Manchester, L.	1869	202,000	77,000	250,000	40,000
Methodist & General, L.	1867	200,000	..	154,000	..
Pearl, Limited	1864	953,000	264,000	1,109,000	238,000
Prudential, Limited	1848	5,691,000	3,518,000	19,616,000	7,912,000
Refuge, Limited	1864	1,204,000	598,000	733,000	236,000
Wesleyan & General ..	1841	549,000	201,000	649,000	223,000
Totals of companies		10,315,000	5,171,000	24,200,000	8,883,000
SOCIETIES.					
Liverpool Victoria Legal	1843	791,000	403,000	1,966,000	684,000
Royal Liver	1850	615,000	405,000	2,071,000	1,104,000
Royal London	1861	668,000	190,000	1,104,000	272,000
Scottish Legal	1852	220,000	103,000	528,000	265,000
Totals of societies		2,289,000	1,101,000	5,669,000	2,325,000
Totals of companies and societies....		12,604,000	6,272,000	29,869,000	11,208,000

Associations	Founded	Income		Funds	
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Just how quickly the industry, and Prudential's particular stake in it, became colossal is remarkable.

Policies were being sold in implausible volumes because multiple small policies were routinely bought on the same life. This was only possible because of the peculiar character of industrial life assurance products. Life insurance contracts since the Life Assurance Act of 1774 were required to meet the legal standards of a demonstrable 'insurable interest' in the life of the person insured^{vii}. This legislation was designed as a response to the notorious practice in early life insurance of using policies effectively as bets on the duration of other lives (Clark, 1998). This meant that the multiple policies on other people's lives – the so-called 'life of another' policies issued in industrial assurance on relatives like dependent children, but also aunts, uncles and grandparents – were technically illegal. The illegality of the sector's core product was tolerated because of the small sums involved and because they were spent on funerals that might otherwise be charged against the public purse. Industrial life was effectively death assurance - small policies taken to cover funeral expenses. Even where policymakers were sympathetic (and many weren't) to the poor's impulse to save for death, the funeral insurance industry had a dreadful reputation. It sold products that were repeatedly condemned by policymakers and reformers across the political spectrum as inappropriate, expensive, legally 'grey' and morally hazardous.

The exasperation with the industry, and the 'feckless' poor who invested in it, led to decades of political controversies and legislative restraints. It wasn't just the percentage of income spent, or even its final motivation, that provoked outrage: it was the structure of the whole system. Industrial life assurance was built around a system of agents who acted to sell the product then collect weekly premiums on the doorstep. Weekly collection was eye-wateringly expensive to deliver, and for several decades an average of around 50% of premium receipts went on administrative expenses. This stoked an argument that the poor were paying far too much for a product they shouldn't want that did little to promote the qualities of thrift that they should. By collecting door to door, agents became the source of discipline that ensured cash-strapped customers paid the regular, weekly premiums required to service their policies.

This made agents the core devices in the distribution and promotion of industrial life assurance, but their role went deeper still. Through weekly collections, agents, literally got ‘inside’ households. They acquired a foothold and a standing that helped defend the high price of the industrial version of life assurance. As the offices caught on to the significance of agents, they were carefully organised and cultivated as ideal representatives, an inoffensive fit in any home, and the industry’s central motif, repeatedly activated through advertising, sales promotion, merchandising etc. Agents were devisers – they did not just take the product to the market, they were expected to prospect, cultivate and nurture their markets, even to become themselves part of what was being traded. At stake was the quality of the relation, the capacity for an ostensibly distant, potentially impersonal organisation to become entwined with the intimate affairs of the domestic and the everyday. To achieve this meant acting as a fully-fledged system, receiving and transmitting information but also responding and adjusting their performance and the products they presented.

This was not work that agents could have managed acting by themselves. Although much of their work was conducted ‘in the field’ and without direct supervision, agents were always the local bearers of a vast, bureaucratic organisation, division and specialisation. They distributed the market attachment work of a series of other actors - accountants, managers, actuaries, mortality tables, medical officers, statisticians, data processors, tabulators, superintendents, publicity experts, clerks and many more. Collectively, this crowd of specialists configured and reconfigured products in line with the aggregated feedback that agents gathered in an attempt to ensure that the products incorporated customer (and seller) experience.

The art of market attachment here rested on Prudential’s capacity to orchestrate countless situated, conversations with the – clearly not quite so – silent poor. These organised conversations spread ideas about how products could fit into people’s lives, solve their problems and stabilise their relationships. Customers had their agents, and agents had their customers but the relationships and conversations they shared were arranged in ways that allowed the Prudential to ‘have’ its market. How does this compare with Wonga’s efforts to have their customers?

Wonga: A morality tale?

For those unfamiliar with it, Wonga is now the largest of the array of so-called ‘payday lenders’ that have multiplied in the UK in recent years, occupying around 30% to 40% of the market (Bachelor, 2014). Payday loans or, to use the industry nomenclature, short-term loans, are high cost, unsecured consumer credit products, usually repayable within around a month (hence the name ‘payday’). Wonga, like many others, also allows borrowers to set far shorter repayment periods – as short as a single day, in their case. Alongside its primary operation in the UK, it has expanded its reach to include Canada, Poland, South Africa and Spain. Following regulatory changes that came into force in 2015, the cost of the loans payday lenders operating in the UK can offer, has been capped (Financial Conduct Authority, 2015). Wonga, like most of its rivals, now provides loans at an annual percentage rate (APR) of just over 1,500% interest, although it prefers to frame this in terms of the lower, non-compound flat or ‘fixed’ annual rate (292%). Before the introduction of this cap, Wonga had attracted huge notoriety as one of the fastest growing lenders in the sector despite blatantly aggressive pricing. With a prominently advertised APR of 4214% in 2010, its rates eventually rose closer to 6,000% APR, around double the cost of those of its (still expensive) direct competitors^{viii}. As a point of comparison with the credit card market, British borrowers with a poor credit history can expect to pay interest between 30% and 40% APR (MoneySavingExpert 2015).

It is Wonga’s historically exceptionally high cost and high profile rather than the company’s size that seems to be the main reason for the intensity of the criticism it has faced in recent years, whether from politicians, advocacy groups, or members of the public. Its ascent to the top of the UK payday lending tree is relatively recent – for much of its history, in terms of market share it sat behind Dollar Financial, which runs the Money Shop network and now occupies around a quarter of the UK market. Wonga rose to public attention initially as an online only lender offering a peculiar justification that algorithmic analysis and data-led pricing lay behind its capacity to combine high customer satisfaction

and the huge interest rates that were prominently displayed on its website^{ix}. Wonga, Maija Palmer reported in the *Financial Times* in 2009

is pushing innovation in this market, harnessing technology to create a faster, slicker, more foolproof service. The online service is entirely automated and available 24 hours a day. Once a user has entered their details, the system pulls in about 1,500 data points to build a picture of their credit history. If accepted, the money can be in a borrower's bank account within the hour, even at 2am.^x

This initially admiring reception turned relentlessly hostile as interest rates rose and began to be obfuscated in distracting television adverts.^{xi} A long-standing feature of Wonga's advertising was a cast of raucous rubber faced puppets that were accused of having an inappropriate capacity to appeal to children (Collison 2013) and a levity that misrepresented the character of their loans. In 2014 the Advertising Standards Authority banned Wonga from using an advertisement that failed to disclose their 5,853% interest rate (Osborne 2014).

Most damaging of all, both reputationally and financially, was the line taken on the company by the Financial Conduct Authority, the UK's newly formed regulatory body with oversight over consumer finance. In 2014, it first ordered an estimated £2.6 million compensation to be paid to customers for unfair debt collection practices (Financial Conduct Authority, 2014a), before compelling Wonga to write off 330,000 loans because of apparent failures to correctly assess the affordability of its products to certain borrowers (we will return to both of these actions shortly) (Financial Conduct Authority, 2014b). The effect of such scandals has been to push Wonga into unprecedented territory. After nearly a decade of unrelenting ascendancy, the company is struggling. In 2014, it made a pre-tax loss of £37.3 million, with revenues, customer numbers, and loan volumes all down by around a third or more on the previous year (Kollewe 2015). The response has been to try to rebrand the company as 'transparent and responsible' – which has included revamping the website, ditching the controversial puppets and displaying more flexibility towards late paying customers (Anon, 2015).

It is tempting to tell Wonga's story to date as a morality tale about the relations between state and commerce, whereby rapacious capitalists meet their just desserts at the hands of a newly invigorated regulator willing to listen to, and act on, public criticism. There is another story to be told here though, one that takes more account of the party that has been largely absent in this tale: Masterman's 'silent poor'. Where exactly do they figure? Who is listening to them, taking account of them (in all senses of that word), and how exactly? What sort of relations, to return to our chapter's starting point, are at stake? Through this we can begin to tie down some of the practical and ethical ambiguities in the everyday work of market attachment.

Wonga: The art of listening?

Wonga's relationship to the British state is not as straightforward as it might seem. A telling example is its appearance before the influential Public Accounts Committee in 2013. Chaired by Member of Parliament, Margaret Hodge, the committee became known for its ability to respond to a public impulse to see high profile, apparently untouchable corporations humbled; a particular success was the committee's forceful interrogation of the tax avoidance practices of Amazon, Google and Starbucks in 2012^{xii}. A similar outcome was anticipated when the committee summoned Wonga as a witness in its investigation of the regulation of consumer credit. The course this encounter took and the report that ensued, however, reveal the degree to which the committee misunderstood Wonga, its customers and its business model, fundamentally limiting their ability to hold Wonga to account.

It is clear from the various lines of questioning, that many in the committee were working on the assumption that Wonga's growth could be traced to its status as the most exploitative in a generally exploitative industry. Concern was expressed not just about the high cost of its loans but about its overall customer treatment. These were detailed discussions but one example, an exchange between the Committee and Wonga representative Henry Raine, on the question of loan 'rollovers', offers a flavour.

Chair [Hodge]: The business model depends on people paying you back on time.

Henry Raine: That is right, and we turn down some two thirds of applicants.

Fiona Mactaggart: But don't you make your money on repeat loans? Don't you make much more money when someone has a repeat loan and a further repeat loan? I am confused, because that seems to be where the very high percentage of your income comes from.

Henry Raine: Just to be clear, people paying us back on time does not only mean that people are paying us back on the first loan. It means we credit-check them again and people can have another loan with us when they have repaid.

Chair: So they do not pay you back on time. You roll over the loan.

Henry Raine: No, we don't. In terms of roll-overs—if I can just briefly explain, because this is an interesting area [...] (Public Accounts Committee 2013, Ev1-2)

As Raine begins to patiently explain here, there is a major distinction between a rollover – effectively an extension on loan – and what is here termed a repeated loan. The latter refers to a customer returning at some future point to borrow again. As Raine discloses, it is this latter scenario that is the basis for Wonga's business model, not the former. In fact, in the resulting report, the committee recommended that Wonga's practice of limiting rollovers to a maximum of three occasions 'is adopted across all lenders' (Public Accounts Committee 2013, 12; in due course, however, the FCA would in fact ban all loan rollovers).

Given its profile, it is easy to see why Wonga was chosen to stand as the representative of the UK payday lending industry^{xiii}. Yet in many ways it was a poor choice: Wonga's business model is quite distinct from those of its competitors. Whereas Wonga operates exclusively online, its nearest rival, Dollar Financial, attracts much of its customers through its high street network of Money Shop outlets. The long tail that makes up the rest of the market is where the murky practices that the committee was hoping to expose with Wonga, are more likely to be found. This particular arm of the state apparatus was, it seems, befuddled by exactly how Wonga went about the business of 'attaching' (or 'having') its market.

This is not to downplay the issues identified by the Financial Conduct Authority, a different and more powerful state institution. The FCA's actions, which are often presented as the victory of the state over an overreaching and aberrant domain of the market, however also missed some vital context. Wonga were, for instance, censured by the FCA for their debt collections practices. These involved Wonga issuing letters purporting to be from law firms that proved to be fictitious. This was done in a conscious effort to mislead debtors into thinking that their case had reached a serious point in the collections process. Yet what the FCA failed until recently to acknowledge is that this practice was also common in the mainstream UK retail banking and consumer credit industry (c.f. Deville 2015). Wonga's attempt to copy a collections practice developed in the standard sector backfired because it had not anticipated the degree of attention that would be focused on its corner of the industry. With regards to affordability assessments, whatever its failings, Wonga paid probably more attention than its rivals to establishing borrowers' ability to repay (see Deville forthcoming, Deville and van der Velden forthcoming). Wonga are more or less unique in the UK payday lending market^{xiv} in the effort they put into credit assessment. This has involved the development of an assessment model that blends conventional credit scoring by Callcredit, a third party credit bureau, with analysis of 1000s of alternate data-points. Key to this has been the attempt to exploit the data that actual and potential customers 'leak' about themselves when accessing Wonga's website. This could be as mundane as their choice of browser, their screen resolution settings, or it could involve clues about user location derived from the IP address, or even traits inferred from browsing habits. At its peak the company claimed that its algorithmic analysis of all these data-points allowed it to make 'objective and unprejudiced' lending decisions^{xv}.

Once a customer has decided on the size of a loan, he is taken through a series of questions. Within about 15 minutes, Wonga has retained around 30 pieces of simple information about a potential borrower. And, from those pieces of information, Wonga has found it can access a further 6,000 to 8,000 online data points that relate to the applicant. ^{xvi}

Wonga won't disclose precisely what data-points they use or how but responsive web optimisation design strategies that alter details of an 'offer' depending on how a user behaves on the page, are an increasingly common feature of Web 2.0 marketing strategies.^{xvii} The company certainly invested in its user interface, making it simpler and more user friendly than many of its rivals. Given the digital trackers that can be detected operating in the background of its site (Deville and van der Velden, forthcoming), it is highly likely Wonga, like many established e-commerce sites, is routinely monitoring this usability to make the customer's route to borrowing and managing loans as smooth as possible. It has therefore very much engaged in the development of the digital marketing toolkits that an ever expanding list of companies are using to better have – and hold on to – their customers. Digital tools like these have begun to supersede the 'man at the door', in organising, gathering and analysing the intimate domestic information that is required to market financial services to the (relatively) silent poor^{xviii}.

Wonga's particular approach to credit risk assessment appears for now to be under threat in the UK. The FCA's recent action included an agreement by Wonga that a 'Skilled Person ... will review the new lending decision platform' (Financial Conduct Authority, 2014b). On the one hand, this does not rule out the possibility of Wonga maintaining at least part of its unique approach to risk assessment. On the other, perhaps it will struggle to demonstrate that some of its more outlandish methods and data sources have a place in the landscape of UK credit assessment.

Despite these new requirements and all the controversies surrounding Wonga, one aspect of the company's business model merits more careful attention than it has yet had. This concerns how Wonga positioned *the character of the relation* between itself and its remote customers as the key to profitability and set digital experiments to work on configuring it. Setting aside the ethical trouble that non-standard lending raises, Wonga achieved something remarkable: amongst a section of the population with constrained financial means, it became the UK's largest payday lender over the course of a period in which it was simultaneously by far the most expensive. There is a long-standing tendency to assume the poor lack the financial skills or 'rationality' to make decisions in their own best interests (McFall 2014)

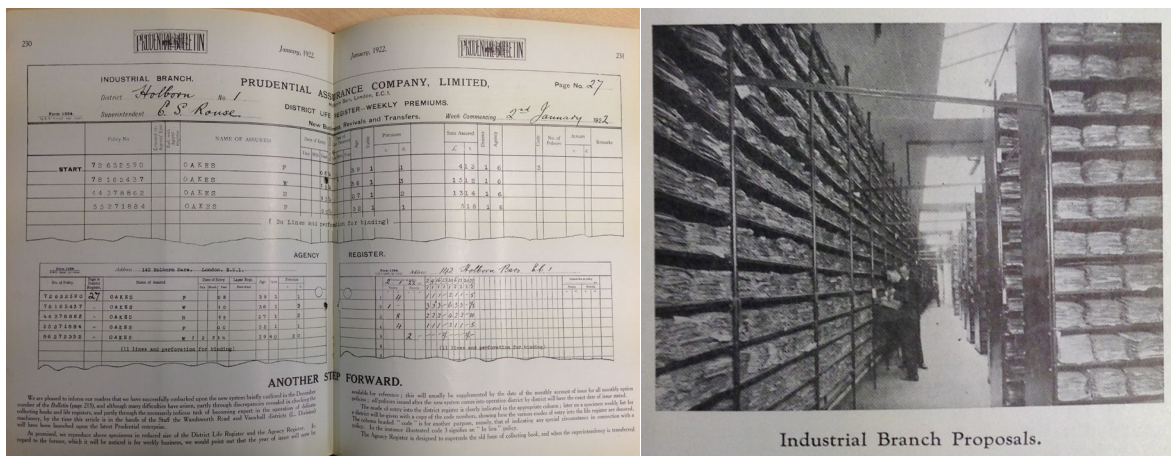
and one does not have to dig too hard at payday lending critiques to detect this sentiment. Yet the uncomfortable fact that loomed over the Public Accounts Committee discussion was that Wonga thrived off borrowers returning repeatedly. Given that it had competitors offering similar products at much lower cost, the continuing appeal of Wonga is worth thinking carefully about. It is easy – and common enough – to dismiss borrowers as foolish, desperate or both and lenders as manipulative, unethical or both. There is truth in all these claims but there is also something more systemic at play. Wonga, like all non-standard financial services providers, at least for a time has devised successful means of listening and responding to those quiet borrowers, on whose behalf critics (and sociologists) so often speak.

Epilogue: Conversation as data

... the central problematic of human affairs is not dealing with scarcity, but dealing with excess. (Abbot, 2014: 1)

Listening in financial services, historically, might be categorized after Zelizer (2005), as ‘relational work’. The human agents of industrial assurance certainly had their conversational skills cultivated. It would be a mistake however to reduce the historical shift in the relational form from Prudential to Wonga as the succession of proximate, human relations by remote, digital ones. Prudential agents certainly conducted human, person-to-person conversations but these conversations were bureaucratically and technically organised on a much larger scale than any at Wonga. The mass processing of millions of pieces of data in advance of automation in insurance companies has been well documented (c.f. Campbell-Kelly 1992; Yates 2005) but what this implies about the way market attachment is - perforce has to be - underpinned by infrastructure, deserves more thought.

Figure 1 and 2 Manual Data Infrastructures at Prudential Assurance, *Prudential Bulletin* 1922



Figures 1 and 2 offer a glimpse into how agents' conversations with their customers were organised through relational data infrastructures. Figure 1 shows a specimen of two of the key data files used in life insurance, the Agency Register and the District Life Register. The Agency Register, a heavy foolscap book, had to be carried by agents working in the field at all times. It records details of the individual lives insured through a particular agent and the premium contributions received. The District Life Register abstracts key elements of the Agency Register data and repeats it to be stored at district level. Figure 2 shows how some of this locally gathered data, the original proposals, was stored at head office. The salient point here is that the front-end human conversation between agent and customer (or 'life') had its own data double in manual registers and archived files. These data doubles informed both how Prudential priced its risks centrally and how agents sold insurance products to their repeat customers locally. For instance, a long-term weekly customer with no premium arrears recorded might be seen as a good prospect for a larger, monthly paid policy offering a better return.

Structurally, this is similar to how data relations were used to price risk at Wonga. Details about precisely what algorithms and data points Wonga use are unavailable but the company have conceded that relational data analysis lies at the foundation of their lending practices.

The crux of the algorithm is less about the individual pieces of data -- your postcode, the colour of your car, how large your mortgage is -- but how these pieces of information relate to one another. Crucially, the data points are stacked against the other pieces of information gleaned from past Wonga clients.^{xix}

At both Prudential and Wonga a range of qualitative and quantitative data were gathered, stored, combined and analysed to inform the product offer. Offering the right product in the right form at the right time – whether money collected on the doorstep every week or money deposited in the bank account within minutes – was central in both companies to their capacity to stably attach or ‘have’ their markets through repeat custom. Listening and talking to customers was a necessary part of this but at neither company was conversation sufficient. Marketing strategy cannot be made out of data or analysis alone - judgement and decisions still have to be made and this is where questions about the efficacy of digital market attachment get interesting.

The glaring difference between Prudential and Wonga is that the conversation with customers at the latter was conducted by digital means. While at its peak, Prudential was processing millions of tiny weekly transactions, from the hands of millions of customers, through those of tens of thousands of agents, to hundreds of districts and finally back to one central head office, this is still not the scale or the level at which ‘big data’ operates. Scale, as boyd and Crawford (2012: 663) explain, is not really what drives the epistemological fascination with big data so much as ‘the capacity to search, aggregate, and cross-reference large data sets’. On these counts, even the reciprocal exchange between life insurance and pre-computer machinery like punched cards and tabulators designed to cope with massive data sets in the first half of the twentieth century (Yates, 2005) falls short. Big data, in boyd and Crawford’s terms, concerns the interplay between technology and analysis that underpins a mythological ‘belief that large data sets can generate insights that were previously impossible, with the aura of truth, objectivity and accuracy’ (2012: 663). It is precisely this kind of mythology that can be detected in Wonga’s founder and former Chief Executive Errol Damelin’s assertion that algorithmic analysis of all those thousands of data-points allowed the company to make ‘objective and unprejudiced’ lending decisions

that would be safe even in a market with a high default rate. Damelin's claims may – or may not – have been a hubristic over-reach but it is clear that Wonga's eventual troubles would not have been solved by any amount or combination of data, technology or analysis. At root, the trouble with Wonga was the judgement that its regulators, critics and eventually its market, would tolerate its business model.

Andrew Abbot's (2014) careful dissection of the problem of excess nails this tension. Excess, overload, superabundant quantities of anything - here specifically data and information - either paralyses or in some other way impedes production. Abbott refers back to Eric Leifer's reflection that skill actually resides in arranging things so that you never have to engage in the impossibilism of making a 'rational' choice from 'the excess of information and the infinite excess of possible futures' (2014: 23). This bind is precisely what is at work in the cognitively conflicted market research industry's efforts to alternately query, orchestrate and legitimate the role of data or information in what can ultimately be 'known' about markets (Cochoy, 2012; Schwarzkopf 2015).

Clearly, while this industry no doubt produces genuine service solutions that help companies work more efficiently, it is also an industry that *structurally* hinges on inducing doubt and managerial ignorance: the more of the latter, the more data are needed. This, in turn, means that the problem of market research data is an agnotological one, a problem bound up closely with ignorance management, the social creation of persistent states of not-knowing, and of never knowing enough. (Schwarzkopf, 2015: 4)

One of the services that commissioned market research provided at Prudential in the late 1960s was data confirming a pattern of decline in the industrial assurance market that the company's internal sales information had been demonstrating for years. The commission report concluded that 'in terms of consumer perceptions of the company certain definition inhibitions ... will require a major calculated action by the Prudential to overcome' (Prudential Assurance Archive, 1970: 1.3). The report offered more data about the factors underlying this decline but what neither it, nor the company, could do on the basis of this data was work out what form the 'major calculated action' required should take. The company was not paralysed by this data, it tried a range of variously fated alternate ventures, but none

that were sufficient to prevent long term decline. Industrial assurance in the UK no longer ‘had’ its customers, listening to them only revealed some of the reasons why. Things worked out differently at Wonga but there too all the millions of data-points the company gathered offered no protection against the tide of public and regulatory critique.

So where then, does this leave the question of what it means to say ‘the market will have you’? In both the formalist and substantivist terms used to analyse economies and markets (Caliskan and Callon, 2009) it will always be possible to conclude that en masse, overall and in the end markets ‘have’ us; they do violence to us. One of the problems with this that our bottom-of-the pyramid cases raise though is, that if markets have us, do us in or do us over, we are complicit in this. In repeat custom, over decades at Prudential and over a shorter period at Wonga, people came back. There are of course ways that this return can be explained. Powerful, manipulative, deceitful companies; ignorant, irrational or desperate consumers, but such explanations often involve critics speaking on behalf of, rather than in conversation with market participants. As the awkward exchanges with Wonga at the Public Accounts Committee demonstrate it is not only the poor who can sometimes be silent in critical and regulatory conversations.

Another of the possibilities we started with was that ‘having us’ was a reference to the technological breakthrough that big, digital data represents. Digital DNA, doppelgangers, or data doubles make us accessible to the market in unprecedented ways. There are however long historical precedents to these attempts to build, know, have and hold on to customer relationships. In the case of Prudential, the quality of the relationship was essential to a marketing strategy that turned on the capacity of agents to be admitted into the intimate, domestic affairs of households. This in turn was underpinned by a data infrastructure that allowed the company to convert relationships and transactions into data that could inform product, promotion and pricing offers. In very different ways, our cases both illustrate a simultaneous use of breadth and depth, quantitative and qualitative market data. Prudential combined qualitative means of engagement through their human agents with manual data infrastructures and Wonga combined qualitative and quantitative data-points and algorithms to

work out who their customers were and, especially, what they might do next. There is an irreducible element of future-casting mystery in the relationship between data showing what consumers have done, even in the immediate past, and what they might do next. What it is that allows the market to ‘have’ us, that turns a product into ‘the thing’ that enables us, becomes us, that already in some way *is* us, before slowly, or sometimes suddenly, it is not - is not wholly explainable. The epistemological chutzpah of big data is that it will solve this mystery to allow markets to imperfectly, but more finally, have us. It can’t and it won’t.

REFERENCES

- Abbott, A. (2014). The Problem of Excess. *Sociological Theory*, 32(1), 1–26.
<http://doi.org/10.1177/0735275114523419>
- Anon (2015) <http://www.marketingmagazine.co.uk/article/1347610/wonga-rebrands-transparent-responsible-lender-hiring-fold7>
- Araujo, L., Finch, J., & Kjellberg, H. [eds.] (2010) *Reconnecting Marketing to Markets* Oxford, Oxford University Press
- Bachelor (2014) <http://www.theguardian.com/money/2014/oct/03/payday-lenders-repay-loans-wonga>
- BBC News (2012) Wonga what makes moneylender tick? <http://www.bbc.co.uk/news/business-18019272> 11 May 2012, accessed 3 Feb 2016
- BBC News (2012) Starbucks, Google and Amazon grilled over tax avoidance <http://www.bbc.co.uk/news/business-20288077> 12 November 2012, accessed 3 Feb 2016
- Beckett, A. (2012) Governing the consumer: technologies of consumption, *Consumption Markets & Culture* 15, 1: 1–18
- boyd, D., & Crawford, K. (2012). Critical Questions For Big Data. *Information, Communication & Society*, 15(5), 662–679. <http://doi.org/10.1080/1369118X.2012.678878>
- Burrows, R. and Gane, N. (2006) 'Geodemographics, software and class', *Sociology*, 40, 5: 793–812
- Burrows, R. & Savage, M. (2014) After the crisis? Big Data and the methodological challenges of empirical sociology, *Big Data & Society*, 1, 1
- Callon, M. (2015) Revisiting marketization: from interface-markets to market-agencements, *Consumption Markets & Culture*, advance online publication, doi. 10.1080/10253866.2015.1067002
- Campbell-Kelly, M. (1992) Large-scale Data Processing in the Prudential, 1850-1930 *Accounting, Business and Financial History*, 2, 2: 117-140
- Clark, G. (1999) *Betting on Lives: the Culture of Life Insurance in England 1695-1775*, Manchester, Manchester University Press
- Cochoy, F. (1998) Another discipline for the market economy: marketing as a performative knowledge and know-how for capitalism', in Callon [ed.] *The Laws of the Markets*, Blackwell, 194–221.
- Collinson (2013), <http://www.theguardian.com/money/2013/nov/05/payday-lenders-accused-grooming-children-ads>
- Deville, J. (2015) *Lived Economies of Default: Consumer Credit, Debt Collection and the Capture of Affect*, London: Routledge
- Felgate, M., Fearne, A & Di Falco, S. (2012) Using supermarket loyalty card data to analyse the impact of promotions, *International Journal of Market Research*, 54, 2: 221-240
- Financial Conduct Authority (2014a) <http://www.fca.org.uk/news/wonga-redress-unfair-debt-collection-practices>
- Financial Conduct Authority (2014b) <http://www.fca.org.uk/news/wonga-major-changes-to-affordability-criteria>
- Financial Conduct Authority (2015), <http://www.fca.org.uk/news/fca-confirms-price-cap-rules-for-payday-lenders>
- Humby, C., Hunt, T. & Phillips, T. (2006) *Scoring Points: How Tesco Continues to Win Customer Loyalty*, Kogan Page, London.
- Kollewe (2015), <http://www.theguardian.com/business/2015/apr/21/wonga-weighs-up-a-name-change-as-it-slumps-into-the-red>
- Kreiss, D. (2012) Taking our country back: the crafting of networked politics from Howard Dean to Barack Obama, New York & Oxford, Oxford University Press

- Knox, H., O'Doherty, D., Vurdubakis, T., & Westrup, C. (2010) The Devil And Customer Relationship Management, *Journal of Cultural Economy*, **3**, 3: 339-359
- Lace, S. [ed.] (2005) *The Glass Consumer: Life in a Surveillance Society*, Policy Press at the University of Bristol
- Latour, B. (1991) Technology is society made durable, in Law, J. [ed.] *The Sociology of Monsters*, London, Routledge, 103-131
- Latour, B. (2002) Gabriel Tarde and the End of the Social: In P. Joyce, [ed.] *The Social in Question*. London, Routledge, 117-132
- Latour, B. & Lepinay, V.A. (2009) *The Science of Passionate Interests: an introduction to Gabriel Tarde's Economic Anthropology*, Chicago, Prickly Paradigm Press
- Lyon, D. (2014) Surveillance, Snowden, and Big Data: Capacities, consequences, critique, *Big Data & Society*, **1**, 2: 1-13
- Maurer, B. (2015) Principles of Ascent and Alliance for Big Data, in Boellstorff & Maurer [eds.] *Data, Now Bigger and Better!* Chicago, Prickly Paradigm Press
- McFall, L. (2014) *Devising Consumption: cultural economies of insurance, credit and spending*, Routledge, London
- McFall, L. (2014b) The problem of cultural intermediaries in the economy of qualities. In Maguire, J. & Matthews, J. [eds.] *The Cultural Intermediaries Reader*, London, Sage
- McFall, L. (2016) What's in a name? Provident, The People's Bank and the regulation of brand identity (2016) *The Routledge Companion to Banking Regulation and Reform* Ertürk, I. & Gabor, D. [eds.]
- MoneySavingExpert (2015) <http://www.moneysavingexpert.com/credit-cards/bad-credit-credit-cards>
- Muniesa, F. Millo, Y. & Callon, M. (2007) An Introduction to Market Devices. In Callon et al. [eds.] *Market devices* Oxford, Wiley-Blackwell,
- Musselin, C. & Paradeise, C. (2005) Quality: a debate, *Sociologie du Travail*, **47**, S89-S123
- Osborne (2014), <http://www.theguardian.com/business/2014/oct/08/wonga-banned-tv-ad-interest-rate>
- Palmer, M. (2009) Wonga drives web loan innovation, *Financial Times* 9 May 2009; accessed 3 February 2016
- Pridmore, J., & Lyon, D. (2011). Marketing as Surveillance: Assembling consumers as brands. *Inside Marketing: Practices, Ideologies, Devices*
- Prudential Assurance Archive (1970) Consumer Attitudes to Insurance and Insurance Companies: A Report from the Attitude Research Programme, Prudential Archive, High Holborn, London
- Public Accounts Committee (2013) <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmpubacc/165/165.pdf>
- Ritzer, G. & Jurgenson, N. (2010) Production, Consumption, Prosumption: The nature of capitalism in the age of the digital "prosumer." *Journal of Consumer Culture*, **10**, 1: 13-36
- Savage, M. & Burrows, R. (2007) The Coming Crisis of Empirical Sociology, *Sociology*, **41**, 5: 885-899
- Savage, M. & Burrows, R. (2009) Some Further Reflections on the Coming Crisis of Empirical Sociology *Sociology*, **43**, 4: 762-772
- Shaw, W. (2011) Cash Machine: could Wonga transform personal finance, *Wired*, 5 May <http://www.wired.co.uk/magazine/archive/2011/06/features/wonga/viewall>
- Schwarzkopf, S. (2015) Data Overflow and Sacred Ignorance: an Agnotological Account of Organizing in the Market and Consumer Research Industry; Conference Paper DOI: 10.13140/RG.2.1.4694.3849
- Shove, E. & Araujo, L. (2010) Consumption, materiality and markets. In Araujo et al. [eds.]
- Simkin, L. & Dibb, S. (2013) Social media's impact on market segmentation and CRM. *Journal of Strategic Marketing*, 21(5), pp.391-393.

- Tadajewski, M. (2008) Relationship Marketing at Wanamaker's in the Nineteenth and Early Twentieth Centuries. *Journal of Macromarketing*, **28**, 2: 169–182
- Tadajewski, M. (2009) The foundations of relationship marketing: reciprocity and trade relations. *Marketing Theory*, **9**, 1: 9–38
- Tadajewski, M., (2015) 'The Complete English Tradesman— business relations, trust, and honesty or “let’s rethink the history of relationship marketing’ *Journal of Historical Research in Marketing*, **7**,3: 407–422
- Tadajewski, M., & Saren, M. (2008) The past is a foreign country: amnesia and marketing theory. *Marketing Theory*, **8**, 4: 323–338
- Vargha, Z. (2010) *Technologies of persuasion: personal selling and the making of markets is consumer finance*. PhD thesis, Columbia University.
- Vargha, Z. (2011) From long-term savings to instant mortgages: financial demonstration and the role of interaction in markets. *Organization*, **18**, 2: 215–235.
- Yates, J. (2005) *Structuring the Information Age: Life Insurance and Technology in the Twentieth Century*, John Hopkins University Press, Baltimore
- Zelizer, V.A. (2005) *The Purchase of Intimacy*, Princeton University Press, Princeton and Oxford
- Zwick, D., & Pridmore, J. (2011) Marketing and the Rise of Commercial Consumer Surveillance. *Surveillance & Society*, **8**, 3: 269–277

ⁱ This is a parochial reference to the emblematic gangster slang associated with the east end of London, ‘we’re gonna ‘ave you’ is an explicit threat of violence to come.

ⁱⁱⁱⁱ KD’s novel is part of conceptual artists Goldin+Senneby’s *Headless* project <http://www.goldinsenneby.com/gs/?p=116>. On *Minority Report* see Knox et al. (2010).

ⁱⁱⁱ See for instance Lace (2005); Zwick & Pridmore (2011); Pridmore and Lyon (2011). Beckett (2012) offers a measured review

^{iv} Beckett (2012) for instance describes how relatively new shopping customs like gift buying for teachers at the end of the school year have become normalized with the help of supermarket CRM and loyalty schemes, while Felgate, Fearn and Di Falco (2012) note how Tesco supermarket’s Clubcard scheme established a new promotional logic of ‘buying on offer’.

^v Life assurance, rather than life insurance, was the term initially adopted, particularly in the UK. ‘Assurance’ refers to insurance against an event that *would* happen, i.e. eventual death as distinct from an event that *might* happen, e.g. theft or death within a given period. Increasingly the term life insurance is generally used but the industry still employs the technical distinction.

^{vi} Prudential Assurance Company Annual Reports

^{vii} A wife, for instance, had an insurable interest in the life of her husband as she would likely be dependent upon him for income.

^{viii} <http://www.bbc.co.uk/news/business-18019272>; Osborne (2014)

^{ix} <http://www.wired.co.uk/magazine/archive/2011/06/features/wonga?page=all>

^x <http://www.ft.com/cms/s/0/be7ead42-48c3-11de-8870-00144feabdc0.html#axzz3zDzrwQEO>

^{xi} <http://www.theguardian.com/media/pda/2008/jul/23/elevatorpitchwongafixestha> ;
<http://www.theguardian.com/money/2013/oct/09/wonga-ad-banned-payday-lender>
<http://www.theguardian.com/money/2013/nov/05/payday-lenders-accused-grooming-children-ads>

^{xii} <http://www.bbc.co.uk/news/business-20288077>

^{xiii} The only other company called was Provident, which offers a quite different credit product c.f. McFall (2016)

^{xiv} Although not globally – see Deville forthcoming

^{xv} See note viii

^{xvi} <http://www.wired.co.uk/magazine/archive/2011/06/features/wonga/viewall>

^{xvii} See Mellet in this collection. Kriess (2012) provides a compelling account of the use of web optimisation strategies in US electoral politics.

^{xviii} Although it is notable that while industrial life assurance products largely disappeared in the UK more than two decades ago, doorstep credit as sold by Provident Financial, continues to have a significant share of the non standard credit market c.f. McFall (2016).

^{xix} See note xvi